

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows an overview of P2P communication in a wireless communication network (e.g., a Universal Terrestrial Radio Access Network (UTRAN) and a 3GPP core network), according to one embodiment of the invention. The UTRAN comprises a radio network controller (RNC) 10 responsible for radio resource allocation and management and a Node B 16, which is a base station transceiver. The UTRAN is connected to a 3GPP core network (CN) 20, which is responsible for high layer signaling and data interaction. Home Location Register (HLR) and Visitor Location Register (VLR) 26 typically located in CN 20 are responsible for recording information about mobile users and related services.

In the embodiment shown FIG. 1, non-dedicated control channels between Node B 16 and mobile terminals (e.g., UE1 and UE2) still exist, while the traffic channels exist only between the UEs. Thus, the wireless communication network can control the P2P communications, e.g., for billing purposes. A more detailed description of this type of P2P communication is disclosed, for example, in a co-pending patent application entitled "Method and System for Establishing Peer-to-Peer Communications in Wireless Communication Networks," filed by Koninklijke Philips Electronics N.V., on March 7, 2003, Attorney's Docket No. CN030003, Application Serial No. 03119892, the disclosures of which are hereby incorporated by reference.